



**ATTACHMENT B**  
**REMARKS**

By virtue of the present amendment, the subject matter of Claim 17 has been incorporated into Claim 16 and Claim 17 has thus been canceled without prejudice. In addition, the claims have been amended to correct an inadvertent error to the claims wherein the word "calcing" has been replaced by the word "calcining" which was reflected in the claims. Applicants respectfully submit that the application in its present form is patentable over the cited references and is in condition for allowance for reasons as set forth below.

In the final rejection, Claims 7-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over JP-06-228570 (referred to as the Examiner as the "JP patent" in view of Masuda et al. U.S. Patent No. 6,042,798 (hereinafter "Masuda") and Logsdon et al. U.S. Patent No. 4,876,402 (hereinafter "Logsdon"). In particular, the Examiner conceded that the JP patent did not disclose numerous elements of the present claims, including a failure to disclose the step of making the catalyst as claimed, and failing to disclose the desulfurization process under the conditions as set forth in the claims, but relied on the Masuda and Logsdon references to supply the missing elements of the claims. However, as explained below, the Examiner is incorrect with regard to the teachings of Logsdon and Masuda, and these references cannot be added to the JP patent to make the claimed invention obvious. Accordingly, for the reasons as set forth below, the Examiner's rejection, insofar as applied to the claims as amended, is respectfully traversed.

In the first place, contrary to the position of the Examiner, Logsdon discloses a method for producing an aldehyde hydrogenation catalyst. The word "catalyst" is defined as a substance that increases the rate of a chemical reaction without itself undergoing any permanent chemical change. Thus, the aldehyde hydrogenation catalyst of Logsdon does **not** absorb sulfur or sulfur compounds in substance.

In contrast, the sulfur-adsorption type desulfurizing agent used in the present invention does adsorb sulfur to itself, resulting in chemical change in the composition of the agent.

As is thus clear from the above discussion, the catalyst of Logsdon and the sulfur-adsorption type desulfurizing agent used in the present invention **are totally different** in their composition, intended uses and functions. Moreover, the presently claimed invention is directed to a hydrocarbon desulfurization method and does **not** relate to a catalyst for promoting a chemical reaction and a method of making a catalyst.

Accordingly, one skilled in the art could **not** apply a method of making the catalyst to a hydrocarbon desulfurization method. Logsdon does **not** provide a basis for the Examiner's rejection on the basis of obviousness of the present invention and instead **teaches away** from the invention for the reasons as set forth above.

Accordingly, one skilled in the art would not combine the catalyst making process of Logsdon with the teaching of the JP-Patent, and thus the present invention is unobvious over these references.

Even further, neither the JP Patent nor the Masuda reference disclose a method for producing the desulfurizing agents of the present invention. Moreover, although the Examiner states that Masuda does disclose such a production method, in fact this is not

the case. To the contrary, Masuda only discloses a production method using a co-precipitation method, and does **not** disclose impregnating iron and/or nickel into a shaped form.

Accordingly, the elements of the present claims that are missing from the JP Patent are **not** provided or taught by either the Logsdon or Masuda references as set forth above, and thus one skilled in the art would **not** have made the combination of the JP patent and Logsdon or Masuda references to have come up with Applicants' invention as presently claimed. The present invention is thus not made obvious by the combination of the JP patent, the Logsdon reference and the Masuda reference, and thus the Examiner's rejection on the basis of these references, insofar as applied to the claims as amended, is respectfully traversed and should be withdrawn.

In view of the amendments and arguments as set forth above, it is submitted that the present application has now been placed in condition for allowance, and such action is respectfully requested.

**END OF REMARKS**